

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 00-813 AE/uh	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE00/01068	International filing date (day/month/year) 25.05.2000	Priority date (day/month/year) 27.05.1999
International Patent Classification (IPC) or national classification and IPC ₇ H 02 K 9/08, H 02 K 1/32		
Applicant ABB AB at al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 18.12.2000	Date of completion of this report 20.07.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Håkan Sandh/mj Telephone No. 08-782 25 00

I. Basis of the report**1. With regard to the elements of the international application:***☒ the international application as originally filed☐ the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

☐ the claims:

pages _____, as originally filed

pages _____, as amended (together with any statement) under article 19

pages _____, filed with the demand

pages _____, filed with the letter of _____

☐ the drawings:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**☐ contained in the international application in written form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. ☐ The amendments have resulted in the cancellation of:**☐ the description, pages _____☐ the claims, Nos. _____☐ the drawings, sheet/fig _____**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).****

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE00/01068

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1-16</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-16</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-16</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The documents cited in the International Search Report represent the general state of prior art. The claimed invention stated in claims 1-16 is not considered to be anticipated by these documents. These documents do not reveal a rotating electric machine and a method for air-cooling thereof as defined by these claims. The teaching of prior art does not lead a skilled person to the invention as defined in the claims.

Accordingly, the invention claimed is novel and considered to involve an inventive step. The invention has industrial applicability.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 00/01068

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H02K 9/08, H02K 1/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H02K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3684906 A (HENRY G. LENZ), 15 August 1972 (15.08.72), figure 1, abstract --	1-16
A	US 4365178 A (HENRY G. LENZ), 21 December 1982 (21.12.82), figure 1, abstract --	1-16
A	DE 3925337 A1 (LOHER AG), 7 February 1991 (07.02.91), column 3, line 17 - line 64, figure 2 -- -----	1-16

☐ Further documents are listed in the continuation of Box C.
 ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 Sept 2000

Date of mailing of the international search report

29 -09- 2000

Name and mailing address of the ISA/

Swedish Patent Office

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Facsimile No. +46 8 666 02 86

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Håkan Sandh/LR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

01/08/00

International application No.

PCT/SE 00/01068

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
US	3684906	A	15/08/72	NONE	
US	4365178	A	21/12/82	CA 1170300 A	03/07/84
DE	3925337	A1	07/02/91	NONE	

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 09 February 2001 (09.02.01)	
International application No. PCT/SE00/01068	Applicant's or agent's file reference P 00-813/AE
International filing date (day/month/year) 25 May 2000 (25.05.00)	Priority date (day/month/year) 27 May 1999 (27.05.99)
Applicant LANDGREN, Nils-Ivar	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
18 December 2000 (18.12.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

3

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Claudio Borton Telephone No.: (41-22) 338.83.38
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/00943

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H02J 3/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H02J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
D,A	WO 9745908 A1 (SIEMENS AKTIENGESellschaft), 4 December 1997 (04.12.97), figure 3, abstract	1-27
A	WO 9843336 A2 (ASEA BROWN BOVERI AB), 1 October 1998 (01.10.98), page 7, line 1 - line 10, figure 1	1-27
A	US 5499178 A (NED MOHAN), 12 March 1996 (12.03.96), column 13, line 5 - line 31, figure 8	1-27

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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- * "&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

16 February 2000

22-02-2000

Name and mailing address of the ISA/

Authorized officer

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Tomas Erlandsson/mj

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/SE 99/00943

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9745908 A1	04/12/97	DE 19620906 A	08/01/98
		EP 0939995 A	08/09/99
WO 9843336 A2	01/10/98	AU 3468797 A	21/01/98
		CA 2218942 A	24/09/98
		EP 0909354 A	21/04/99
		SE 9701060 A	04/03/98
		SE 9703329 A	25/09/98
		US 5980095 A	09/11/99
US 5499178 A	12/03/96	WO 9418683 A	18/08/94
		EP 0617858 A	05/10/94
		JP 7502160 T	02/03/95
		US 5345375 A	06/09/94
		WO 9312576 A	24/06/93

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 00/01068

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Authorized officer

Håkan Sandh/LR

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT
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01/08/00

International application No.
PCT/SE 00/01068

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
US	3684906	A	15/08/72	NONE	
US	4365178	A	21/12/82	CA 1170300 A	03/07/84
DE	3925337	A1	07/02/91	NONE	

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year) 09 February 2001 (09.02.01)	
International application No. PCT/SE00/01068	Applicant's or agent's file reference P 00-813/AE
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WO 00/74215 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.